

This listing of claims replaces all prior versions and listings of claims in this application.

LISTING OF CLAIMS:

Claim 1 (Currently Amended): A standard for calibrating an instrument
~~comprising~~ consisting essentially of:

- (a) one or more viscosity changing polymers; and
- (b) at least one dye.

Claim 2 (Original): The standard of claim 1, wherein the viscosity changing polymer is a pH responsive polymer, a temperature responsive polymer, or any mixture thereof.

Claim 3 (Original): The standard of claim 2, wherein the viscosity changing polymer is a pH responsive polymer.

Claim 4 (Original): The standard of claim 3, wherein the pH responsive polymer is a liquid at a pH of less than about 4.5.

Claim 5 (Original): The standard of claim 3, wherein the pH responsive polymer is a hydrophobically-modified alkali-swellaable emulsion polymer.

Claim 6 (Original): The standard of claim 5, wherein the hydrophobically-modified alkali-swellaable emulsion is an acrylic carboxylate emulsion polymer.

Claim 7 (Original): The standard of claim 5, wherein the hydrophobically-modified alkali-swellaable emulsion is an alkali-swellaable emulsion urethane-modified emulsion polymer.

Claim 8 (Original): The standard of claim 1, wherein the viscosity changing polymer has a viscosity of at least about 10,000 cP.

Claim 9 (Original): The standard of claim 8, wherein the viscosity changing polymer has a viscosity of at least about 100,000 cP.

Claim 10 (Original): The standard of claim 1, wherein the viscosity changing polymer is transparent to light at a wavelength ranging from about 300 to about 1,000 nm.

Claim 11 (Original): The standard of claim 1, wherein the dye is a fluorescent dye.

Claim 12 (Original): The standard of claim 1, wherein the instrument is a spectrometer, multi-well plate reader, or imager.

Claim 13 (Original): A container for calibrating a spectrometer comprising:

- (a) a container; and
- (b) a standard of claim 1 in or on the container.

Claim 14 (Original): The container of claim 13, wherein the container is a plate.

Claim 15 (Original): The plate of claim 14, wherein the plate is a micro-well plate and the standard is in at least one micro-well of the plate.

Claim 16 (Original): The container of claim 13, wherein the container is a cuvette.

Claim 17 (Original): A process for preparing a standard comprising the steps of:

- (a) mixing one or more viscosity changing polymers and at least one dye; and
- (b) gelling the mixture.

Claim 18 (Original): A process for preparing a container for calibrating an instrument comprising the steps of:

- (a) dispensing one or more viscosity changing polymers and at least one dye into a container to form a mixture; and
- (b) gelling the mixture.

Claim 19 (Original): The process of claim 18, wherein step (a) comprises the steps of:

- (i) mixing the viscosity changing polymers and the dye; and
- (ii) dispensing the mixture into the container.

Claim 20 (Original): The process of claim 18, wherein the viscosity of the viscosity changing polymer being dispensed ranges from about 1 to about 1,000 cP.

Claim 21 (Original): The process of claim 18, wherein the viscosity changing polymer is a pH responsive polymer.

Claim 22 (Original): The process of claim 21, wherein step (b) comprises increasing the pH of the mixture sufficiently to gel the mixture.

Claim 23 (Original): The process of claim 22, wherein the mixture in step (a) has a pH of less than about 4.5 and step (b) comprises increasing the pH to at least about 5.

Claim 24 (Original): The process of claim 22, wherein step (b) comprises diffusing an alkaline gas through the mixture.

Claim 25 (Original): The process of claim 24, wherein the alkaline gas is ammonia gas.

Claim 26 (Original): The process of claim 22, further comprising the step of:

(c) neutralizing the gel formed in step (b) to a pH of from about 6 to about 8.

Claim 27 (Original): The process of claim 18, wherein the viscosity of the viscosity changing polymer in the gel in step (b) is at about 10,000 cP.

Claim 28 (Original): A method for calibrating an instrument comprising the step of calibrating the instrument with the standard of claim 1.

Claim 29 (Original): The method of claim 28, wherein the instrument is a spectrometer, multi-well plate reader, or imager.

Claim 30 (New): The process of claim 17 consisting essentially of:

- (a) mixing one or more viscosity changing polymers and at least one dye; and
- (b) gelling the mixture.

Claim 31 (New): The process of claim 18 consisting essentially of:

- (a) dispensing one or more viscosity changing polymers and at least one dye into a container to form a mixture; and
- (b) gelling the mixture.